

33769-701.831.txt SEQUENCE LISTING

	A THADE	
	Hengst, Ludger Cilensek, Zoran Grimmler, Matthias	
<120>	Tyrosine phosphorylation of CDK Inhibitor Proteins of the Cip	/Kip Family
<130>	33769-701.831	
	US 10/576,845 2004-10-20	
<160>	25	
<170>	PatentIn version 3.2	
<211> <212>	1 597 DNA Homo sapiens	
1.00	1 acg tgcgagtgtc taacgggagc cctagcctgg agcggatgga cgccaggcag	60
gcggagc	acc ccaagccctc ggcctgcagg aacctcttcg gcccggtgga ccacgaagag	120
ttaaccc	ggg acttggagaa gcactgcaga gacatggaag aggcgagcca gcgcaagtgg	180
aatttcg	att ttcagaatca caaaccccta gagggcaagt acgagtggca agaggtggag	240
aagggca	gct tgcccgagtt ctactacaga cccccgcggc cccccaaagg tgcctgcaag	300
gtgccgg	cgc aggagagcca ggatgtcagc gggagccgcc cggcggcgcc tttaattggg	360
gctccgg	cta actctgagga cacgcatttg gtggacccaa agactgatcc gtcggacagc	420 ·
cagacgg	ggt tagcggagca atgcgcagga ataaggaagc gacctgcaac cgacgattct 🕟	480
tctactc	aaa acaaaagagc caacagaaca gaagaaaatg tttcagacgg ttccccaaat	540
gccggtt	ctg tggagcagac gcccaagaag cctggcctca gaagacgtca aacgtaa	597
<211> <212> <213>	2 198 PRT Homo sapiens	

Met Ser Asn Val Arg Val Ser Asn Gly Ser Pro Ser Leu Glu Arg Met $1 \hspace{1cm} 10 \hspace{1cm} 15 \hspace{1cm} 15$

Asp Ala Arg Gln Ala Glu His Pro Lys Pro Ser Ala Cys Arg Asn Leu 20 25 30

Phe Gly Pro Val Asp His Glu Glu Leu Thr Arg Asp Leu Glu Lys His 35 40 45

						٠		33	769-	701.	831.	txt				
Cys	Arg 50	Asp	Met	Glu	Glu	Ala 55	Ser						Phe	Asp	Phe	
Gln 65	Asn	His	Lys	Pro	Leu 70	Glu	Gly	Lys	Tyr	Glu 75	Trp	Gln	Glu	val	Glu 80	
Lys	Gly	ser	Leu	Pro 85	Glu	Phe	туг	Tyr	Arg 90	Pro	Pro	Arg	Pro	Pro 95	Lys	
Gly	Ala	Cys	Lys 100	val	Pro	Ala	Gln	Glu 105	Ser	Gln	Asp	val	ser 110	Gly	Ser	
Arg	Pro	Ala 115	Ala	Pro	Leu	Ile	Gly 120	Ala	Pro	Ala	Asn	Ser 125	Glu	Asp	Thr	
нis	Leu [.] 130	Val	Asp	Pro	Lys	Thr 135	Asp	Pro	Ser	Asp	Ser 140	Gln	Thr	Gly	Leu	
Ala 145	Glu	Gln	Cys	Ala	Gly 150	Ile	Arg	Lys	Arg	Pro 155	Ala	Thr	Asp	Asp	Ser 160	
Ser	Thr	Gln	Asn	Lys 165	Arg	Ala	Asn	Arg	Thr 170	Glu	Glu	Asn	Val	Ser 175	Asp	
Gly	Ser	Pro	Asn 180	Ala	Gly	Ser	val	Glu 185	Gln	Thr	Pro	Lys	Lys 190	Pro	Gly	
Leu	Arg	Arg 195	Arg	Gln	Thr	·										
<210 <211 <211 <211	1> ' 2>	3 495 DNA Homo	sap	iens												
<400 atg		3 aac	cggc [.]	tggg	ga t	gtcc	gtca	g aa	ccca	tgcg	gca	gcaa	ggc (ctgc	cgccg	= 60
ctc	ttcg	gcc	cagt	ggac	ag c	gagc	agct	g age	ccgc	gact	gtga	atgc	gct	aatg	gcgggd	120
tgc	atcc	agg a	aggc	ccgt	ga g	cgat	ggaa	c tt	cgac	tttg	tca	ccga	gac a	acca	ctggag	180
ggt	gact [.]	tcg	cctg	ggag	cg t	gtgc	gggg	cct	tggc	ctgc	cca	agct	cta	cctt	ccac	g 240
ggg	ccc	ggc	gagg	ccgg	ga t	gagt	tggga	a gga	aggca	aggc	ggc	ctgg	cac	ctca	cctgct	300
ctg	ctgc	agg (ggac	agca	ga g	gaag	acca ⁻	t gt	ggac	ctgt	cac	tgtc	ttg ·	tacc	ttgtg	360
cct	cgct	cagi	ggga	gcag	gc t	gaag	ggtc	c cca	aggt	ggac	ctg	gaga	ctc ·	tcag	ggtcga	a 420
aaa	cggc	ggc a	agac	cagc	at g	acag	attt	c ta	ccac	tcca	aac	gccg	gct	gatc	ttctc	480
aaga	aggaa	agc (ccta	a					į	Page	2					495

<210> 4

<211> 164

<212> PRT

<213> Homo sapiens

<400> 4

Met Ser Glu Pro Ala Gly Asp Val Arg Gln Asn Pro Cys Gly Ser Lys $1 \hspace{1cm} 10 \hspace{1cm} 15$

Ala Cys Arg Arg Leu Phe Gly Pro Val Asp Ser Glu Gln Leu Ser Arg 20 25 30

Asp Cys Asp Ala Leu Met Ala Gly Cys Ile Gln Glu Ala Arg Glu Arg 35 40 45

Trp Asn Phe Asp Phe Val Thr Glu Thr Pro Leu Glu Gly Asp Phe Ala 50 55 60

Trp Glu Arg Val Arg Gly Leu Gly Leu Pro Lys Leu Tyr Leu Pro Thr 65 70 75 80

Gly Pro Arg Arg Gly Arg Asp Glu Leu Gly Gly Gly Arg Arg Pro Gly 85 90 95

Thr Ser Pro Ala Leu Leu Gln Gly Thr Ala Glu Glu Asp His Val Asp 100 105 110

Leu Ser Leu Ser Cys Thr Leu Val Pro Arg Ser Gly Glu Gln Ala Glu 115 120 125

Gly Ser Pro Gly Gly Pro Gly Asp Ser Gln Gly Arg Lys Arg Arg Gln 130 135 140

Thr Ser Met Thr Asp Phe Tyr His Ser Lys Arg Arg Leu Ile Phe Ser 145 150 155 160

Lys Arg Lys Pro

<210> 5

<211> 951

<212> DNA <213> Homo sapiens

<400> 5

atgtccgacg cgtccctccg cagcacatcc acgatggagc gtcttgtcgc ccgtgggacc
ttcccagtac tagtgcgcac cagcgcctgc cgcagcctct tcgggccggt ggaccacgag

60

120

33769-701.831.txt

gagctgagcc	gcgagctgca	ggcccgcctg	gccgagctga	acgccgagga	ccagaaccgc	180
tgggattacg	acttccagca	ggacatgccg	ctgcggggcc	ctggacgcct	gcagtggacc	240
gaagtggaca	gcgactcggt	gcccgcgttc	taccgcgaga	cggtgcaggt	ggggcgctgc	300
cgcctgctgc	tggcgccgcg	gcccgtcgcg	gtcgcggtgg	ctgtcagccc	gcccctcgag	360
ccggccgctg	agtccctcga	cggcctcgag	gaggcgccgg	agcagctgcc	tagtgtcccg	420
gtcccggccc	cggcgtccac	cccgccccca	gtcccggtcc	tggctccagc	cccggccccg	480
gctccggctc	cggtcgcggc	tccggtcgcg	gctccggtcg	cggtcgcggt	cctggccccg	540
gccccggccc	cggccccggc	tccggctccg	gccccggctc	cagtcgcggc	cccggcccca	600
gccccggccc	cggccccggc	cccggccccc	gccccggccc	cggccccgga	cgcggcgcct	660
caagagagcg	ccgagcaggg	cgcgaaccag	gggcagcgcg	gccaggagcc	tctcgctgac	720
cagctgcact	cggggatttc	gggacgtccc	gcggccggca	ccgcggccgc	cagcgccaac	780
ggcgcggcga	tcaagaagct	gtccgggcct	ctgatctccg	atttcttcgc	caagcgcaag	840
agatcagcgc	ctgagaagtc	gtcgggcgat	gtccccgcgc	cgtgtccctc	tccaagcgcc	900
gcccctggcg	tgggctcggt	ggagcagacc	ccgcgcaaga	ggctgcggtg	a	951

<210> 6

<211> 316 <212> PRT

<213> Homo sapiens

<400> 6

Met Ser Asp Ala Ser Leu Arg Ser Thr Ser Thr Met Glu Arg Leu Val $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Ala Arg Gly Thr Phe Pro Val Leu Val Arg Thr Ser Ala Cys Arg Ser 20 25 30 .

Leu Phe Gly Pro Val Asp His Glu Glu Leu Ser Arg Glu Leu Gln Ala 35 40 45

Arg Leu Ala Glu Leu Asn Ala Glu Asp Gln Asn Arg Trp Asp Tyr Asp 50 55 60

Phe Gln Gln Asp Met Pro Leu Arg Gly Pro Gly Arg Leu Gln Trp Thr 65 70 75 80

Glu Val Asp Ser Asp Ser Val Pro Ala Phe Tyr Arg Glu Thr Val Gln 85 90 95

Val Gly Arg Cys Arg Leu Leu Ala Pro Arg Pro Val Ala Val Ala 100 105 110

33769-701.831.txt

Val Ala Val Ser Pro Pro Leu Glu Pro Ala Ala Glu Ser Leu Asp Gly 115 120 125

Leu Glu Glu Ala Pro Glu Gln Leu Pro Ser Val Pro Val Pro Ala Pro 130 135 140

Ala Ser Thr Pro Pro Pro Val Pro Val Leu Ala Pro Ala Pro 145 150 155 160

Ala Pro Ala Pro Val Ala Ala Pro Val Ala Ala Pro Val Ala Val Ala 165 170 175

Val Leu Ala Pro Ala Pro Ala Pro Ala Pro Ala Pro Ala Pro 180 185 190

Ala Pro Val Ala Ala Pro Ala Pro Ala Pro Ala Pro Ala Pro 195 200 205

Ala Pro Ala Pro Ala Pro Ala Pro Asp Ala Ala Pro Gln Glu Ser Ala 210 215 220

Glu Gln Gly Ala Asn Gln Gly Gln Arg Gly Gln Glu Pro Leu Ala Asp 225 230 235 240

Gln Leu His Ser Gly Ile Ser Gly Arg Pro Ala Ala Gly Thr Ala Ala 245 250 255

Ala Ser Ala Asn Gly Ala Ala Ile Lys Lys Leu Ser Gly Pro Leu Ile 260 265 270

Ser Asp Phe Phe Ala Lys Arg Lys Arg Ser Ala Pro Glu Lys Ser Ser 275 280 285

Gly Asp Val Pro Ala Pro Cys Pro Ser Pro Ser Ala Ala Pro Gly Val 290 295 300

Gly Ser Val Glu Gln Thr Pro Arg Lys Arg Leu Arg 305 310 315

<210> 7

<211> 29

<212> DNA

<213> Homo sapiens

<400> 7

ggatccggga gacatatgtc aaacgtgcg

<210> 8

33769-701 831 +v+

			JJ/ 03 / 01.031. CAC	
<211> <212> <213>	34 DNA Homo sapiens	·		
<400> ggagtc1	8 ttct gcagtttgca	ttactatccc	tagg	34
<210> <211> <212> <213>	9 32 DNA Homo sapiens	, .		
<400> gcttgc	9 . ccga gttctatttc	agacccccgc	gg	32
<210> <211> <212> <213>	10 32 DNA Homo sapiens			
<400> ccgcgg	10 gggt ctgaaataga	actcgggcaa	gc	32
<210> <211> <212> <213>	11 34 DNA Homo sapiens			
<400> gcttgc	11 ccga gttcttctac	agacccccgc	ggcc	34
<210> <211> <212> <213>	12 34 DNA Homo sapiens	·		
<400> ggccgcg	12 gggg gtctgtagaa	gaactcgggc	aagc	34
<210> <211> <212> <213>	13 30 DNA Homo sapiens	. ·		
<400> ccccta	13 gagg gcaagttcga	gtggcaagag		30
<210> <211> <212> <213>	14 30 DNA Homo sapiens	· .	· · · · · ·	
<400> ctcttg	14 ccac tcgaacttgc	cctctagggg		30
ر210			•	

33769-701.831.txt

<211> <212> <213>	27 DNA Homo sapiens	33703 701.031.686	
<400> gccgcg	15 gggg tctgaagaag aactcgg	2	27
<210> <211> <212> <213>	16 24 DNA Homo sapiens		
<400> catatg	16 ccca acctttttgt ggca	·	24
<210> <211> <212> <213>	17 25 DNA Homo sapiens		
<400> catatg	17 gtca acagcctgga gaaac		25
<210> <211> <212> <213>	18 24 DNA Homo sapiens		
<400> cttcag	18 cagg ttctggtctt ggtg		24
<210> <211> <212> <213>	19 21 DNA Homo sapiens		
<400> gcatate	19 gggg cagcagcctg g	2	21
<210> <211> <212> <213>	20 20 DNA Homo sapiens	*	•
<400> gcaggc	20 ggat ccgacgggcc	2	20
<210> <211> <212> <213>	21 15 PRT Homo sapiens		
<400>	21	*	
Glu Lys	s Gly Ser Leu Pro Glu Phe	Tyr Tyr Arg Pro Pro Arg Pro	

```
<210>
<211>
<212>
         22
12
         PRT
<213>
        Homo sapiens
<400> 22
Ser Leu Pro Glu Phe Tyr Tyr Arg Pro Pro Arg Pro 1 	 5 	 10
<210>
<211>
<212>
         23
10
         PRT
<213>
       Homo sapiens
<400> 23
Leu Pro Glu Phe Tyr Tyr Arg Pro Pro Arg 1 5 10
<210>
<211>
<212>
<213>
         24
         8
         PRT
         Homo sapiens
<400> 24
Pro Glu Phe Tyr Tyr Arg Pro Pro 1
<210> 25
<211> 6
<212> PR
        PRT
<213>
       Homo sapiens
<400>
         25
Glu Phe Tyr Tyr Arg Pro 5
```